

ABSTRACT

A proportional, pilot-operated flow control valve is disclosed which can include a cage, a hollow compensating spool slidably disposed within the cage, a hollow metering guide member slidably disposed within the compensating spool, a regulating spool slidably disposed within the guide member, a dampening guide slidably disposed inside the compensating spool to define a dampening chamber, a compensating spring disposed inside the dampening chamber and arranged to urge the dampening guide to engage the metering guide and the compensating spool to engage the cage, a regulating spring disposed inside the regulating spool and urging the regulating spool to abut the dampening guide, and a cartridge, the cartridge having a pilot valve assembly and an adaptor, the adaptor mounted to the cage, the pilot valve assembly mounted to the adaptor, the pilot valve assembly including an actuator.